



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/828,906

04/21/2004

Joanna Hong Zhang

J6886(C)

5655

201 7590 12/19/2007
UNILEVER INTELLECTUAL PROPERTY GROUP
700 SYLVAN AVENUE,
BLDG C2 SOUTH
ENGLEWOOD CLIFFS, NJ 07632-3100

EXAMINER

FISHER, ABIGAIL L

ART UNIT

PAPER NUMBER

4173

MAIL DATE

DELIVERY MODE

12/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/828,906	Applicant(s) ZHANG ET AL.	
	Examiner ABIGAIL FISHER	Art Unit 4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-6, 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of Amendments and Remarks filed on October 31 2007 is acknowledged. Claims 7 and 8 were cancelled. Claim 1 was amended. Claims 11 and 12 were added. Currently, claims 1-6, and 9-12 are pending. Claims 3 and 9 are withdrawn as being directed to a non-elected invention. Claims 1-2, 4-6, 10-12 are directed to the elected invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 4-6 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodrigues et al. (US PG PUB No. 2002/0100122) in view of Nakatsu et al. (Patent No. 5965518).

Applicant Claims

Applicant claims a personal care composition, which they have defined in the specification to be lotions, creams as well as fabric-applied formulations (specification, paragraph 00030). This composition comprises an unsaturated organic material, a substituted urea, and a cosmetically acceptable carrier. Useful carriers as defined by Applicant included water, saturated emollients and saturated fatty acids (specification, paragraph 00019). One specific urea claimed is hydroxyethyl urea. The unsaturated material contains at least two olefinic double bonds and those double bonds are in a conjugated relationship. The substituted urea is present in an amount from about 0.01 to about 20%. The weight ratio of substituted urea relative to the unsaturated material is about 10,000:1 to about 1:100 (or about 10,000:1 to about 500:1). The Applicant has limited the composition to be in the form of skin lotions, skin creams, shampoos, shower gels, toilet bars, antiperspirants, deodorants, dental products, shave creams, depilatories, lipsticks, foundations, mascara, sunless tanners, and sunscreen lotions.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Rodrigues et al. describes dilute fabric softener formulations (example 23) that contain a hydroxyl compound and a perfume. Preferred hydroxyl urea compounds include N-2-hydroxyethyl urea (paragraph 0018), which reads on claim 2 of the instant application and meets the requirement of a substituted urea of claim 1. Water is included in formulation of the fabric softener thereby meeting the cosmetically acceptable carrier requirement of claim 1 of the instant application. Rodrigues et al. discloses that the hydroxyl compounds in the fabric softener composition are from 0.0001 to 20 percent (paragraph 0037), which reads on claim 5 of the instant application. The perfume included in the fabric softener (example 23) formulation of Rodrigues et al. is from 0.2 to 0.5 percent, which reads on claim 4 of the instant application. The ratio of substituted urea relative to the unsaturated material of example 23 of Rodrigues et al. reads on claim 6 of the instant application.

Nakatsu et al. describes fragrance compositions that have antimicrobial activity (abstract). These fragrance compositions comprise non-aromatic terpenoids (abstract). Nakatsu et al. discloses that the fragrances are made by selecting and combining various materials. These materials include non-aromatic terpenoid compounds of which various hydrocarbon cyclic terpenoids are listed including terpinene (column 3, lines 37-45). The various non-aromatic terpenoid compounds of Nakatsu et al. include terpinene and phellendrene. These are terpenoid compounds that contain at least two double

Art Unit: 1614

bonds and those double bonds are in a conjugated relationship. Nakatsu et al. discloses that the fragrance compound can be used in a fabric softener (claim 18).

Ascertainment of the Difference Between Scope the Prior Art and the Claims
(MPEP §2141.012)

Rodrigues et al. does not describe what specific types of perfumes can be included in the compositions.

Rodrigues et al. does not specify the claimed weight ratio range from about 10,000:1 to about 500:1.

Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)

It would have been obvious to someone of ordinary skill in the art at the time of the instant invention to practice the invention of Rodrigues et al. using the fragrance composition of Nakatsu et al. One of ordinary skill in the art would be motivated to do this because the fabric softener of Rodrigues et al. contains water and therefore a fragrance composition that possesses antimicrobial activity would be advantageous. This would result in the practice of the instantly claimed invention with a reasonable expectation of success.

It would have been obvious to one of ordinary skill in the art to optimize the ratio of substituted urea to perfume material. It would have been obvious to one of ordinary skill in the art at the time of the invention to engage in route experimentation to determine optimal or workable ranges that produce expected results.

Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. **In re Aller, 220 F. 2d 454, 105 USPQ 233 (CCPA 1955).**

While only two of terpenoids listed by Nakatsu et al. are terpenoids that contain two double bonds that are in a conjugated relationship, it would have been obvious to one of ordinary skill in the art to pursue known options within his or her technical grasp, i.e. those perfume compounds listed in the prior art as being suitable for use in various cosmetic compositions. Therefore it would have been obvious to one of ordinary skill in the art to try all the terpenoid compounds listed by Nakatsu et al.

Regarding claim 10 of the instant application. Nakatsu et al. does not specify specific Iodine Values of the various terpenoid compounds. However the compounds of Nakatsu et al. are the same as those listed as hydrocarbon cyclic terpenoids in the instant application. Therefore there is a reasonable expectation that these compounds meet the required Iodine Value range as set forth in claim 10 of the instant application.

It is noted that In re Best (195 USPQ 430) and In re Fitzgerald (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter which there is reason to believe inherently includes functions that are newly cited or is identical to a product instantly claimed. In such a situation the burden is shifted to the applicants to "prove that subject matter shown to be in the prior art does not possess characteristic relied on" (205 USPQ 594, second column, first full paragraph).

New Rejection Necessitated by the Amendments of 10/31/07

Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodrigues et al (US PG PUB No. 2004/0266921) in view of Nakatsu et al. (US Patent No. 5965518).

Applicant Claims

Applicant claims a personal care composition comprising an unsaturated organic material with at least two olefinic double bonds in a conjugated relationship, a substituted urea, and a cosmetically acceptable carrier. The urea is hydroxyethyl urea. Useful carriers as defined by Applicant included water, saturated emollients and saturated fatty acids (specification, paragraph 00019). Applicant has limited the composition to be in the form of skin lotions, skin creams, shampoos, shower gels, toilet bars, antiperspirants, deodorants, dental products, shave creams, depilatories, lipsticks, foundations, mascara, sunless tanners, and sunscreen lotions.

Determination of the Scope and Content of the Prior Art

(MPEP §2141.01)

Rodrigues et al. is directed to use of hydroxyalkyl urea in aqueous-based polymer compositions to maintain hydration of said composition. Preferred hydroxyalkyl urea compounds are those derived from urea and comprise only a single urea group, at least one hydroxy group, and at least two carbon atoms between the urea group and the hydroxyl group (paragraph 0016). Preferred hydroxyl urea compounds include N-2-hydroxyethyl urea (paragraph 0020, and the conditioner example). The compositions may be formulated with adjuvants. Adjuvants that are useful include fragrances and anti-bacterials (paragraph 0035). Examples of the formulations include shampoo,

Art Unit: 1614

conditioner, and shower gels. The examples include water, which is a cosmetically acceptable carrier.

The teachings of Nakatsu et al. are set forth above. Specifically Nakatsu describes fragrance compositions that have antimicrobial activity (abstract). These fragrance compositions comprise non-aromatic terpenoids (abstract). The various non-aromatic terpenoid compounds of Nakatsu et al. include terpinene and phellendrene. These are terpenoid compounds that contain at least two double bonds and those double bonds are in a conjugated relationship. Nakatsu et al. discloses that the fragrance compound can be used in a skin cream, hand and body lotion, sunscreen agent, hair conditioner, shampoo, deodorant, and antiperspirant (claim 18).

Ascertainment of the Difference Between Scope the Prior Art and the Claims

(MPEP §2141.012)

Rodrigues et al. does not specify the type of perfumes that are suitable.

Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)

It would have been obvious to someone of ordinary skill in the art at the time of the instant invention to practice the invention of Rodrigues et al. using the fragrance composition of Nakatsu et al. One of ordinary skill in the art would be motivated to do this because the personal care formulations of Rodrigues et al. contains water and therefore a fragrance composition that possesses antimicrobial activity would be advantageous. Rodrigues et al. indicates that both anti-bacterial and fragrances are

Art Unit: 1614

suitable adjuvants. Therefore it would have been obvious to one of ordinary skill in the art to include these types of adjuvants.

While only two of terpenoids listed by Nakatsu et al. are terpenoids that contain two double bonds that are in a conjugated relationship, it would have been obvious to one of ordinary skill in the art to pursue known options within his or her technical grasp, i.e. those perfume compounds listed in the prior art as being suitable for use in various cosmetic compositions. Therefore it would have been obvious to one of ordinary skill in the art to try all the terpenoid compounds listed by Nakatsu et al.

This would result in the practice of the instantly claimed invention with a reasonable expectation of success.

Response to Arguments

Applicant's arguments filed October 31 2007 have been fully considered but they are not persuasive.

Applicants argue that the cited references start from the solution rather than the problem. The Applicant states that Rodrigues et al. ('122), which is a formulation with substituted ureas seeks to further find compatible formation. The combination of these two references is inappropriate because the references present the invention's solution in the position of being a problem. Also Applicant indicates that even if the combination of references were appropriate, Rodrigues et al. ('122) does not disclose the constituents of the perfume. Applicants have additionally questioned why one of

Art Unit: 1614

ordinary skill in the art would specifically select Nakatsu et al. with so many other reported fragrance compositions in the literature.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, as discussed above, one of ordinary skill in the art would have been motivated to combine the references because both Rodrigues et al. ('122) and Nakatsu et al. references teach providing a fragrance and/or perfume in a cosmetic composition. The fragrance compositions of Nakatsu et al. have antimicrobial activity. Therefore these fragrance compositions provide the added bonus of not only to impart a pleasing odor but as well exhibit antimicrobial activity. It is for these reasons that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Rodrigues et al. ('122) and Nakatsu et al.

The examiner further more respectfully notes that even though Applicants have recognized another advantage which would flow naturally from following the suggestion of the prior art, namely the stabilization of terpenoid components by the hydroxyethyl urea, this advantage cannot in and of itself be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicants have additionally argued that after one of ordinary skill in the art would be selected to combine the teachings of Rodrigues et al. ('122) and Nakatsu et al., only two of the terpenoid compounds listed by Nakatsu et al. possess two double bonds in a conjugated relationship. Applicants argue that a skilled chemist would seek to avoid the Nakatsu et al fragrance because of the conjugated materials.

This is not found to be persuasive because while it may be true that these types of terpenoids do cause discoloration, the prior art still recognizes them as being suitable in cosmetic formulations. Therefore one of ordinary skill in the art would have been motivated to choose these fragrances. These fragrances also have the added benefit of being anti-microbial as well as imparting a pleasing odor.

The examiner further respectfully notes that *prima facie* obviousness does not require prior art references to recognize or even suggest the problem that Applicants attempted to solve. In addition, the prior art does not have to teach combining the references for the reason that Applicants combined them. *In re Dillon*, 919 F.2d 688, 692-93, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990, en banc).

Conclusion

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abigail Fisher whose telephone number is 571-270-3502. The examiner can normally be reached on M-Th 9am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718 or Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Abigail Fisher
Examiner
Art Unit 4173

AF

/Ardin Marschel/
Supervisory Patent Examiner, Art Unit 1614